

ABSTRACT

One embodiment of the present invention is an arrangement for establishing connectivity between the inputs and outputs of n ports in a switching system includes first and second matrices of cross points and a control circuit. The first matrix includes $n \times n$ cross points, each first matrix cross point establishing a unilateral path between two of the n ports. The second matrix includes $n \times n$ cross points, each second matrix cross point establishing a unilateral path between two of the n ports. The control circuit is associated with a first cross point of the first matrix and a complementary cross point of the second matrix, the first cross point operable to establish a unilateral path from a source port (i) to the destination port (j), the complementary cross point operable to establish a unilateral path from the destination port (j) to the source port (i).